## Change Control for XML in XML





A delta format for XML data files



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#### **Change Control in XML**



- Death and taxes are the two certainties of life...
- And the other is that whatever you do in XML will change!
- Design any system with this in mind
  - How will changes be made?
  - How will changes be identified?
  - How will changes be controlled?
- The EXPRESS model will change
  - As well as the documentation, examples, test files....



#### DeltaXML: how can it help?



- DeltaXML is designed to identify changes in XML files
- Changes are themselves represented in XML
- Can be used to automatically find changes, so
  - The changes can be checked
    - By hand or automatically
  - The changes can be displayed
  - The changes can be sent as update files
- Because the delta file is XML it can be processed, e.g. using XSLT



#### Do you need a DTD?



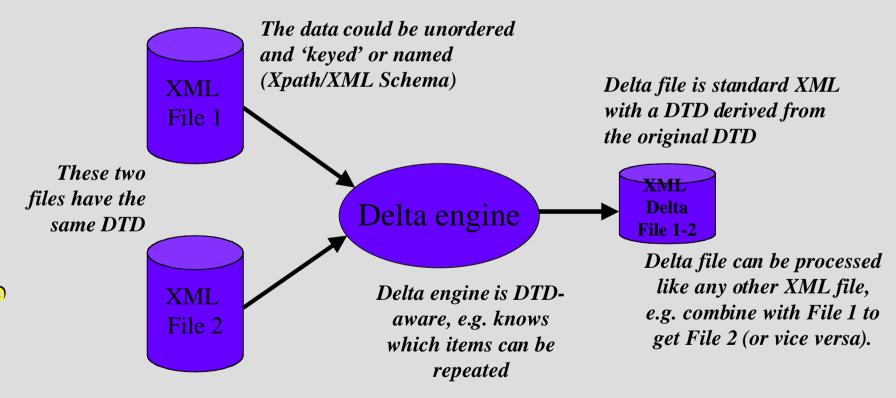
- No: there is a general-purpose solution
  - Useful for XML files that have no defined structure (DTD)
  - Useful for document files where the data is ordered
- Also a more intelligent solution for particular XML DTDs
  - Knows about the DTD so can create smaller delta files
  - Can be configured to understand unordered data
  - Can be configured to use 'keys' to identify data elements.



#### **Delta XML**



It is an intelligent XML 'differencing engine'





# How can this help STEP using XML?



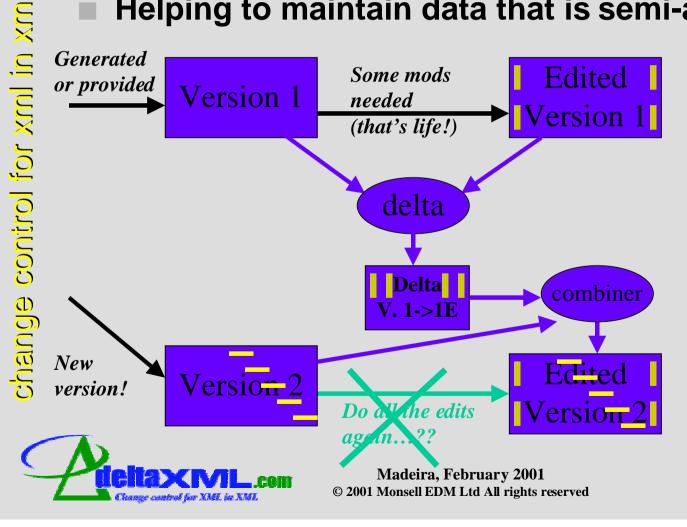
- You can identify changes in XML files from which generate the documentation
- You can identify changes in XHTML that is generated
- You can identify changes in EXPRESS models in XML
- You can even identify changes in test data in XML
  - Or compare generated data with benchmarks
    - DeltaXML has been used for P28 comparing data



### Just a thought... in case you have this problem



Helping to maintain data that is semi-automated



Health warning: this will not work in all cases!.

#### **Conclusions**



- DeltaXML can help you to identify and control changes to STEP XML documentation
- Design your DTDs with change in mind... and it will be easier to handle
- DeltaXML uses XML for the delta format, so can be processed in XSLT etc.
- Available now at www.deltaxml.com

